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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,706	04/04/2001	Yatin R. Acharya	95-391	1771

20736 7590 10/17/2005

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EXAMINER

KNOLL, CLIFFORD H

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,706

Applicant(s)

ACHARYA ET AL.

Examiner

Clifford H. Knoll

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7,8 and 11-13 is/are rejected.
- 7) ☒ Claim(s) 2-6,9 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Office Action is responsive to communication filed 8/1/05. Currently claims 1-13 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. *Claims 1, 7-8, and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp (US 6621799 B1), in view of common features, as evidenced by Dearth (US 6744765 B1).*

Regarding claim 1, Kemp discloses at an end of each access cycle storing in a table entries identifying respective packets (e.g., col. 9, lines 19-21), and during each access cycle requiring an acknowledgement message receipt within a prescribed time interval following transmission (e.g., col. 8, lines 27-32), resetting acknowledgement waiting bit for a selected one of the entries by an acknowledgement manager in response to reception of an acknowledgement message (e.g., col. 10, lines 58-62), and transferring the entries having a determined absence of the reset stored acknowledgement waiting bit upon expiration of the prescribed time interval to a

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transmit queue (e.g., col. 13, lines 51-54). Kemp does not expressly mention use of the Infiniband protocol; however, Examiner takes Official Notice that Infiniband is a well-known standard packet-based system network protocol as evidenced by Dearth (e.g., col. 1, lines 32-36), thus applicable to the packet-based protocol of Kemp. It would have been obvious to one of ordinary skill in the art to combine Infiniband with the system of Kemp, because Infiniband provides an improved scalable bus standard for packet systems such as Kemp (e.g., col. 1, lines 19-24).

Regarding claim 7, Kemp also discloses the access cycle defined by a prescribed number of clock cycles (e.g., Fig. 12, lines 1204-1206 show storage at the end of the access cycle).

Regarding claim 8, Kemp discloses a table for storing at an end of each access cycle entries identifying respective packets (e.g., col. 9, lines 19-21), and during each access cycle requiring an acknowledgement message receipt within a prescribed time interval following transmission (e.g., col. 8, lines 27-32), resetting acknowledgement waiting bit for a selected one of the entries by an acknowledgement manager in response to reception of an acknowledgement message (e.g., col. 10, lines 58-62), and transferring the entries having a determined absence of the reset stored acknowledgement waiting bit upon expiration of the prescribed time interval to a transmit queue (e.g., col. 13, lines 51-54). Kemp does not expressly mention use of the Infiniband protocol; however, Examiner takes Official Notice that Infiniband is a well-known standard packet-based system network protocol as evidenced by Dearth (e.g., col. 1, lines 32-36), thus applicable to the packet-based protocol of Kemp. It would

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have been obvious to one of ordinary skill in the art to combine Infiniband with the system of Kemp, because Infiniband provides an improved scalable bus standard for packet systems such as Kemp (e.g., col. 1, lines 19-24).

Regarding claim 11, Kemp also discloses the access cycle defined by a prescribed number of clock cycles in a single storage transaction (e.g., Fig. 12, lines 1204-1206 show storage transaction at the end of the access cycle).

Regarding claim 12, Kemp also discloses the access cycle defined by a prescribed number of clock cycles in a single storage transaction (e.g., Fig. 12, lines 1204-1206 show storage transaction at the end of the access cycle).

Regarding claim 13, Kemp does not expressly mention the implementation of an application-specific integrated circuit; however, Examiner takes Official Notice that integration of circuits is a widely known and commonly used feature, as evidenced by Dearth (e.g., col. 22-25). It would have been obvious to one of ordinary skill in the art to use integrated circuits because of increased performance in factors such as size and power.

Allowable Subject Matter

2. *Claims 2-6 and 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.*

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Olsen (US 5245616 A) teaches the counting of transmitted packets awaiting acknowledgement (e.g., col. 1, 49-54,59-63; col. 2, lines 1-5) and retransmitting (e.g., col. 2, lines 7-9).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clifford H. Knoll whose telephone number is 571-272-3636. The examiner can normally be reached on M-F 0630-1500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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